

Table 1
Perchlorate in Surface Water Samples
Happy Valley Drainage NPDES Monitoring Locations

Date	Happy Valley Outfall	
	HV-1	HV-2
3/25/1998	0.020 ^(a)	NE
5/5/1998	0.0351 ^(a)	NE
5/5/1998	0.022 ^(a)	NE
5/14/1998	0.0283 ^(a)	NE
5/14/1998	0.00824 ^(a)	NE
2/21/2000	<0.020	NE
2/23/2000	0.016	NE
3/5/2000	0.013	NE
3/6/2000	<0.004	NE
3/8/2000	<0.004	NE
3/9/2000	0.017	NE
3/10/2000	<0.008	NE
3/11/2000	0.0082	NE
4/18/2000	0.0094	NE
1/12/2001	0.008	NE
2/13/2001	0.0055	NE
2/26/2001	0.0042	NE
2/27/2001	<0.004	NE
3/5/2001	0.0053	NE
3/6/2001	<0.004	NE
3/7/2001	0.0049	NE
3/8/2001	0.0052	NE
3/9/2001	0.0048	NE
3/12/2001	<0.004	NE
2/12/2003	0.0047	<0.004
2/25/2003	0.012	<0.004
3/15/2003	0.0053	<0.004
5/3/2003	<0.004	0.0046
5/3/2003	--	0.0066 ^(b)

Notes:

1. No NPDES surface water samples were generated at the Happy Valley Outfall in 2002 (low rainfall year).
2. Outfall HV-2 was not established (NE) until November 2002, and thus was not sampled prior to Spring 2002.

^(a) - Surface water sample location upstream of current monitoring point

^(b) - Field duplicate sample

All data in milligrams per liter (mg/L)

-- Not sampled/analyzed

Bold indicates detected concentration

Maximum and minimum detected values highlighted as:

Maximum detected **Minimum detected**

NPDES = National Pollutant Discharge Elimination System



TABLE 2
SUMMARY OF PROPOSED INTERIM MEASURES
BUILDING 359 AREA AND HAPPY VALLEY RFI SITES

Interim Measure Activity	Applicability at:	
	Southern Happy Valley Area ¹	Building 359/Northern Happy Valley Areas ¹
Excavation and Treatment	<p>Sediment from the upper reach of the Happy Valley drainage will be excavated and transported to the Building 359 area and treated by composting.</p> <p>Evaluate excavation effectiveness by producing artificial run-off and sampling for the presence of perchlorate. If impacted, consider additional excavation.</p>	No excavations of soil or sediment currently planned for the Building 359/Happy Valley North Area.
In-Situ Treatment	Degrade perchlorate in the Building 745 area by in situ composting.	Degrade perchlorate in the Building 316, 359 and 376 areas by in situ composting.
Additional Characterization and Contingent Measures		
<ul style="list-style-type: none"> Soils Underlying Building Foundations 	Sample soil underlying buildings according to approved RFI sampling protocol(s). If impacted, treat by in situ composting.	Sample soil underlying buildings according to approved RFI sampling protocol(s). If impacted, treat by in situ composting.
<ul style="list-style-type: none"> Drainage Sediments 	<p>Sample drainage sediments by producing field leachates according to approved RFI sampling protocol(s) and by simulating active runoff. If impacted, treat by in situ composting.</p> <p>Sample sediments being treated near end of dry season. If perchlorate has not been sufficiently degraded prior to rainy season, isolate runoff by placing impermeable cover(s) over impacted reaches or excavate sediments.</p>	No sampling of drainage sediments planned. Drainages leading from this area are concrete-lined.
<ul style="list-style-type: none"> Bedrock 	Sample exposed bedrock from upper reach of Happy Valley drainage. If impacted, consider either re-routing drainage to bypass bedrock, placement of an impermeable cover or sealing bedrock to minimize contact with surface water.	No sampling of bedrock planned. Impacted areas are overlain by soils.
<ul style="list-style-type: none"> Areas Undergoing Treatment by Degradation 	Sample soils being treated near end of dry season. If perchlorate has not been sufficiently degraded prior to rainy season, cover treatment area(s) with impermeable cover.	Sample soils being treated near end of dry season. If perchlorate has not been sufficiently degraded prior to rainy season, cover treatment area(s) with impermeable cover.

¹The specific areas planned for interim measures activities are shown on Figure 10.